

Virginia’s Chesapeake Bay 2022-2023 Programmatic Milestones

Milestone Number	Phase III WIP Initiative or Page Number	Lead Agency/ Supporting Agencies	Actions & Deliverables	Target Dates	General Comments	Funding/ Grant Details
Agriculture - Key Ongoing Activities						
A1	WIP Initiative 30	Department of Environmental Quality (DEQ)	Reissue the Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management (9VAC25-192-10 et seq.) Publish Notice of Intended Regulatory Action (NOIRA). Complete Technical Advisory Committee (TAC) meetings.	Dec. 31, 2022 Dec. 31, 2023	This general permit prescribes a set of Best Management Practices (BMPs) established in State Water Control Law (§ 62.1-44.17:1.) for a particular universe of animal feeding operations.	State funds
A2	p. 43	Department of Conservation and Recreation (DCR)	Require private sector Virginia-certified nutrient management planners who participate in Direct Pay to conduct Nutrient Management Plan verification.	Ongoing	Private Direct Pay Planners enrolled in NMP Direct Pay are required to do NMP verification in year two and three of plan life.	State and federal funds
A3	WIP Initiative 16	DCR	Conduct annual Agricultural Needs Assessment and report funding needs to Governor and Virginia General Assembly.	Nov. 1, 2022, Nov. 1, 2023	Updated annually	State funds
A4	WIP Initiative 13	DCR	Conduct both cover crop and conservation tillage surveys in Chesapeake Bay watershed.	Jun. 30, 2022		State funds
A5	WIP Initiative 13	VCE in partnership with DEQ, DCR, Virginia Department of Agriculture and Consumer Services	Continue work of the Voluntary Agriculture BMP Task Force to evaluate effective approaches to document BMPs implemented without cost share. Partners review 2020 farmer survey effort and review the potential for process improvements and efficiencies and determine whether to repeat this effort in future years.	Mar. 1, 2022	Analyze results of survey and site visits. Present initial and final findings to Task Force. Complete final report .	Survey administrator received \$156,100 in funding support from the Water Quality Improvement Fund and EPA/DEQ to carryout survey design,

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		(VDACS), Virginia Department of Forestry (VDOF), SWCDs, VCE, Virginia Tech (VT), U. S. Department of Agriculture - Natural Resources Conservation Service (NRCS), U.S. Environmental Protection Agency (EPA), and agriculture representatives.				implementation, and reporting.
A6	WIP Initiative 14	DCR, DEQ, VDOF, VCE, VDACS, Virginia Association of Soil and Water Conservation Districts (VASWCD)	Conduct cross-training with partners, agencies and organizations that assist farmers. Continually identify and pursue opportunities to improve coordination.	Ongoing	Information regarding the related WIP Initiative #14 work plan can be found on DEQ's Chesapeake Bay Phase III WIP webpage .	
A7	WIP Initiative 15	DEQ, VCE	In support of DEQ's Agriculture BMP Loan Program, VCE will continue to receive referrals from DEQ and others for producers that are interested in participating in the program but need assistance with completing and submitting the loan paperwork.	Ongoing		

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A8	WIP Initiatives 16, 17	Office of Secretary of Natural and Historic Resources (OSNHR)	Support budget proposals with adequate and consistent state funding to meet the agricultural needs assessment for both agricultural BMPs and technical assistance.	Ongoing	Request increases in state cost share and technical assistance funding at least equal to that identified by the annual updates to the Agricultural Needs Assessment. Full funding for the Agricultural Needs Assessment in the budget proposal is available on Virginia's LIS website .	State funds
A9	WIP Initiatives 17, 22	DCR	Revisit/revise recommendations of the Virginia Soil and Water Conservation Board Allocation Subcommittee to allocate base technical assistance (TA) funding to SWCDs for FY 2023-2024. Include consideration of SWCD workloads related to state tax credits and BMP verification.	Dec. 2022	Review and revise, if necessary, base TA for FY 2023-2024 by Jul 1, 2022.	State funds
A10	WIP Initiative 20	DCR	Examine options and present to the Virginia Soil and Water Conservation Board an approach that would regionalize prioritization of BMPs in the agricultural BMP cost share program. This examination will take into account BMPs prioritized for meeting the Phase III WIP goals, soil health initiatives, and carbon sequestration.	Jun. 30, 2023	Soil loss functionality will be incorporated into the Conservation Application Suite by Jun. 30, 2022, which will then allow changes to the Conservation Efficiency Factor (CEF). Changes to CEF will be made after the addition of soil loss functionality, which will advance efforts to regionalize prioritization of BMPs during FY 2023.	
A11	WIP Initiative 20	DCR	Report Soil Conservation and Water Quality Plans to include all federal and state conservation plans associated with agricultural BMPs in lifespan.	Ongoing		
A12	WIP Initiative 20	DCR	Seek input from VACS technical advisory committee on expanding financial assistance for BMP maintenance into the VACS program with specific focus on maintenance as a barrier to farmers and landowners implementing riparian forest buffers.	Jan. 1, 2023	Funding for budget maintenance provided in the budget proposal found on Virginia's LIS website .	State funds

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A13	WIP Initiative 24	DCR	Incorporate practices and/or bundles of practices, that provide climate change benefits, such as soil health, that also improve water quality into the VACS program.	Jul. 1, 2023		
A14	WIP Initiative 24	DCR	Explore, and implement as appropriate, putting various BMP bundles, including Resource Management Plan BMPs into one cost share contract to make it easier for agricultural producers to sign up for financial incentives while increasing acres enrolled in the program.	Ongoing	This will include necessary updates to the Conservation Application Suite to support more efficient workflows for the bundled BMPs.	
A15	WIP Initiative 26	DCR	Complete and post map of perennial streams in Virginia's Chesapeake Bay watershed to allow farmers and the general public to determine where livestock stream exclusion should be implemented.	Jul. 1, 2022	Project is currently underway with GeoDecisions with completion expected during the second quarter of 2022. The perennial stream map will be located on DCR's website once complete.	
A16	WIP Initiative 27	DCR	Monitor and report continued progress of livestock stream exclusion efforts with a goal of exclusion from all perennial streams. Monitor and report continued progress of nutrient management plan efforts with a goal of 85% implementation of nutrient management plans.	Ongoing	Reports available on DCR's Soil and Water Conservation webpage .	State funds
A17	WIP Initiative 27	DCR	Develop outreach plan for farm community on WIP December 2025 deadline and the requirements that will take effect in July 2026 if targets are not met. Determine capacity needs for an enforcement program if needed.	Sept. 1, 2022 Dec. 31, 2023		State funds
A18	WIP Initiative 29	DCR	Continue to promote subsidized poultry litter transport.	Ongoing		State funds

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A19	WIP Initiative 33	VDACS	Report BMPs installed to resolve founded Agricultural Stewardship Act (ASA) complaints.	Ongoing	ASA related BMPs are reported via a database maintained by DCR. Previous reporting issues in the database have been addressed.	State funds
A20	p. 120	VDOF	Forest Buffer – VDOF will expand its collaboration with partners and provide technical assistance in NRCS, USDA and SWCD districts in order to achieve riparian forest buffer project goals. It will also use grant programs such as the Virginia Environmental Endowment (VEE) Middle James Grant program to implement projects where traditional cost share programs do not attract landowner participation.	Dec. 31, 2023	VDOF has hired three Riparian Buffer Specialists to work in high need counties. Positions are based in Warrenton, Woodstock and Crimora. Currently advertising a Riparian Specialist to assist in the Middle James River Buffer Project area.	VEE Middle James Grant, WQIF, CREP, EQIP, USDA, State Lands WIP, James River Consortium, CBRAP, State Lands Fund
A21	p. 120	VDOF	Forest Buffer (with exclusion fencing) – Continue to coordinate and develop cost share programs with partner agencies to coordinate efforts and provide technical assistance on stream side exclusion practices.	Dec. 31, 2023	VDOF will continue to search for new, innovative partnerships and methods of stream exclusion practices with partners. These include participation with the Riparian Consortium, VACS program and the Chesapeake Bay Forest Work Group.	VEE Middle James Grant, WQIF, CREP, EQIP, USDA, State Lands WIP, James River Consortium, CBRAP, State Lands Fund
A22	p. 212	VDOF	Tree Planting – VDOF will continue to utilize Reforestation of Timberland funding (RT), Ag. BMP, Environmental Quality Incentives Program (EQIP), Conservation Reserve Enhancement Program (CREP), NRCS and other cost share programs to impact tree planting projects in the watershed, including outreach efforts and technical assistance to provide a dedicated focus on program improvements, expansion and implementation.	Dec. 31, 2023	RT program has matured and is celebrating its 50-year anniversary. Continues to be a reforestation strong point as well as afforestation.	VEE Middle James Grant, WQIF, CREP, EQIP, Reforestation of Timberlands, NRCS, DCR, State Lands WIP, CBRAPP
A23	p. 26	Center for Coastal Resource Management (CCRM), Virginia	Sea level rise impacts on Agricultural Lands – CCRM, VIMS and DCR to determine if sea level rise adaptation can be incorporated into the Virginia Agriculture BMP Cost Share Program.	Dec. 31, 2023	Related research report: Farm Resiliency Education for At-Risk Coastal Areas in the Chesapeake Bay	

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		Institute for Marine Science (VIMS)			CCRM / VIMS has initiated conversations with DCR to consider opportunities for potential adaptations including wetland creation and alternative crops.	
	Agriculture – WIP Chapter 7 Initiatives					
A24	WIP Initiatives 1, 11, 13, 26, 28, 40, 41	VCE, Virginia State University (VSU), VT	<p>Establish Chesapeake Bay Program Coordinator within VCE. Work with existing VCE, VT and VSU faculty that conduct water quality related educational programs to:</p> <p>Learn about and compare existing program content and outcomes to Chesapeake Bay reporting requirements. Examples include educational programming related to septic system use, upkeep, and installation; grazing and hay feeding; home/yard garden management practices, and; urban nutrient management, among other topics.</p> <p>Identify opportunities to capture program outcomes that have positive implications for water quality and are not currently being identified through existing evaluation efforts.</p> <p>Work with faculty to devise evaluation strategies to capture participant practice changes in a format that informs the traditional purpose of program evaluation from an educational programming perspective, and results in data, where applicable, that supports partner agency reporting efforts and progress toward WIP goals.</p> <p>Work with the Bay Interagency Implementation Team to identify research needs.</p>	Dec. 2023	Timeline contingent on the hiring of a Program Coordinator or M.S. level graduate student.	<p>Program would require approximately \$89,000 annually. (\$178,000 over FY 2023-2024).</p> <p>Funding for VCE is included in the budget proposal available on Virginia’s LIS website.</p>

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			<p>Serve as the survey administrator for future editions of the Chesapeake Bay Voluntary Agricultural BMP Farmer Survey.</p> <p>Coordinate the VCE Healthy Virginia Lawns Program and insure that corresponding outcomes are captured and reported.</p>			
A25	WIP Initiatives 1, 13, 15, 26, 27, 28, 31, 32, 37, 38, 39, 40, 41	VCE, State and Local Governments, Stakeholders	Work with stakeholders and state & local partners to continue progress toward addressing Extension agent capacity needs to deliver educational programming within the Chesapeake Bay watershed region.	Ongoing	At the time of this narrative position needs include 12 agriculture and natural resources Extension agent positions, as follows: Amherst, Nelson, Spotsylvania, Charles City, Surry/Sussex, Richmond County, Henrico, Fredericksburg, Clarke, King George, Fairfax, and District Forestry and Natural Resources.	An estimated \$594,000 (recurring) is needed to fill these positions.
A26	WIP Initiative 14	DCR	Implement Data Sharing Agreement with USDA-NRCS to re-verify federally funded agricultural BMPs with expired lifespans since 2010.	Jul.1, 2022		State and federal funds
A27	WIP Initiatives 19, 24	DCR	Expand existing agricultural BMP pilot projects to additional areas within the Chesapeake Bay watershed in order to accelerate WIP Implementation.	Ongoing	In FY 2019-2021, DCR developed and implemented Whole Farm Approach, Small Herd Stream Exclusion, erosion mitigation, NMP Direct Pay, and RMP Direct Pay.	State funds
A28	WIP Initiative 23	DCR	Propose revisions to the Resource Management Plan (RMP) regulations and VSWCB policies that will promote an increase in certified planner capacity and both RMP development and certification.	Jan. 1, 2023		State funds
A29	WIP Initiative 25	DCR	Revise NMP Regulations to enable interested persons to qualify with two years of college education instead of four years. Where appropriate, begin to collaborate with community colleges on workforce development to promote this professional opportunity.	Jul. 1, 2022		State funds

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A30	WIP Initiative 26	DEQ	<p>Increase NMP implementation on agricultural lands:</p> <p>During routine compliance inspections, DEQ staff will promote the benefits of whole farm nutrient management plans and provide information regarding the requirements of § 62.1-44.121 of the Code of Virginia related to the NMP requirement for producers managing 50 acres or more of cropland in the Chesapeake Bay watershed, and explain the conditional effective date.</p>	Ongoing through Dec. 2023	§ 62.1-44.17:1. (Permits for confined animal feeding operations) and § 62.1-44.17:1.1 (Poultry waste management program) of the Code of Virginia and 9VAC25-192-10 et seq. (VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management) and 9VAC25-630-10 et seq. (Virginia Pollution Abatement Regulation and and General Permit for Poultry Waste Management) require NMPs for fields where collected manure is land applied. Management of cropland where manure is not applied is excluded from the scope of the Law and regulation and thereby restricts the agency to promotion and education regarding whole farm NMPs.	State funds
A31	WIP Initiative 26	DCR	Continue partnership with the Small Farm Outreach Program at Virginia State University (VSU-SFOP) to inform socially disadvantaged farmers about both the VACS and federal agricultural BMP incentive programs.	Jul. 1, 2023		State funds
A32	WIP Initiative 27	DEQ	<p>Livestock stream exclusion:</p> <p>During routine compliance inspections, DEQ staff will promote the benefits of stream exclusion for pastured livestock, refer permitted growers to their local SWCD where applicable and provide information regarding the requirements of § 62.1-44.123 of the Code of Virginia related to bovine livestock stream exclusion from any perennial stream in the Chesapeake Bay watershed and explain the conditional effective date.</p>	Ongoing through Dec. 31, 2023	§ 62.1-44.17:1. of the Code of Virginia (Permits for confined animal feeding operations) and 9VAC25-192-10 et seq. (VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management) only prescribe BMPs for the confinement areas and land application of collected manure. Management of livestock on pastures are excluded from the scope of the Law and regulation and thereby restricts the agency to promotion and education regarding livestock exclusion in non-confinement areas for this initiative.	State funds
A33	WIP Initiative 28	DCR	Research practical and economical uses for horse manure. Develop a marketing plan to promote its reuse.	Jul. 1, 2023		State funds

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A34	WIP Initiative 30	DEQ	<p>Improve poultry litter transport accounting:</p> <p>Begin annual reporting requirement for growers and end-users – submission upon DEQ request and in format prescribed by DEQ.</p> <p>Deadline for grower reporting of transfer data from Jul. 1, 2022 – Jun. 30, 2023</p> <p>Deadline for grower and end-user reporting of transfer data from Jul. 1, 2023 – Jun. 30, 2024</p>	<p>Beginning Feb. 17, 2022</p> <p>Sept. 15, 2023</p> <p>Sept. 15, 2024</p>	<p>The Virginia Pollution Abatement Regulation and General Permit for Poultry Waste Management (9VAC25-630-10 et seq.) was amended and reissued in 2021 to include annual reporting requirements for both the permitted grower and the end-user of poultry waste. The new requirements will be phased in beginning Feb.17, 2022 through Feb. 17, 2024. DEQ is in the final stages of development of the poultry waste transfer database and external portal for external users to report their poultry transfer data more efficiently. Use of this portal will also be phased in and will include an educational component.</p>	State funds, CBRAP grant used for development of an external portal and database for poultry waste transfer data.
A35	WIP Initiative 31	DCR	<p>Review new CREP policies with USDA-FSA to determine whether Virginia should amend its CREP agreement. Increase the state cost share to 50% providing 100% cost share for farmers implementing forest buffers at least 35-feet wide.</p> <p>Provide additional incentives to assist farmers maintaining 35-foot or wider riparian forest buffers (dependent on additional funding). Develop a state incentive to encourage renewal of CREP contracts.</p> <p>Target CREP marketing at pastures and hayfields in Virginia’s Chesapeake Bay watershed.</p>	Jul. 1, 2022	Additional state funding for CREP is included in the budget proposal available on Virginia’s LIS website.	State funds
A36	WIP Initiative 33	VDACS	Report past stream exclusion practices implemented through the Agricultural Stewardship Act (ASA) Program that were not previously reported and tracked (prior to 2016). New ASA staff added in FY 2022 will	Dec. 31, 2022		State funds

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			assist the ASA Program in tracking these past practices and verifying they are still functioning.			
A37	WIP Initiative 33	VDACS, DCR	VDACS marketing staff in conjunction with Virginia Commonwealth University have been working to develop a tiered certification program for farmers and growers under the VA Grown domestic marketing program. The program would encompass not just local and fresh, but also quality, certified and sustainable. The sustainable part would reflect products grown under a Resource Management Plan or Conservation Plan, and certified would be Harmonized GAP or higher. Work from VCU is due back by the end of August or early Sept. 2021. Once that is received, VDACS would then consult with DCR and craft the specific certification program.	Dec. 31, 2022		State funds
A38	WIP Initiative 33	VDACS	VDACS has established a new reimbursement program to assist dairy farmers that participate in the federal Dairy Margin Coverage Program. The new VDACS Dairy Producers Margin Coverage Premium Assistance Program (Program) will reimburse dairy farmers in the state for the premium payments they have made for the federal Dairy Margin Coverage program at the tier 1 level. The federal risk management program, the Dairy Margin Coverage program, is an insurance program designed to assist producers in coping with industry volatility, such as depressed milk prices, increasing input costs, market changes, and other unforeseen changes. Dairy farmers in Virginia that participate in the federal coverage program at the tier 1 level and (i) have a resource management plan and have been certified as having implemented such plan by or are in the process of having such plan reviewed by DCR or a local soil and	Ongoing	Chapters 330 and 331 of the 2021 Special Session 1 Acts of Assembly establishes the program. Eligible dairy producers must apply by Feb. 1 of each year to participate.	State funds, \$1 million allocated for FY 2022.

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			water conservation district or (ii) have a nutrient management plan that has been approved by or is currently being reviewed by DCR are eligible to apply to participate in the Program. Reimbursement will be provided on a first-come, first-served basis based on available funding.			
A39		DEQ, DCR, VDACS	Respond to 2021 EPA Animal Agriculture Programs Assessment.	Ongoing through Dec. 31, 2023	EPA commenced an update to the 2015 Animal Agriculture Programs Assessment in 2021. Virginia agencies will consider the findings and respond as appropriate.	
A40	WIP Initiative 14	DCR	Pursue Soil and Water Conservation Board policy to articulate expectations for outreach to new, small and underserved farmers.	Jul. 1, 2022		State funds
A41		VCE, NRCS, Virginia Soil Health Coalition	Healthy Soils Initiative: The Virginia Soil Health Coalition facilitates communication and collaboration among partners across the commonwealth to support farmers, leverage resources, and advance strategies that increase soil health and the understanding of its many co-benefits. The Virginia Soil Health Coalition supports four core principles of soil health management: keep soil covered, minimize soil disturbance, maximize living roots, and energize with diversity. Efforts will be made to explore VA Soil Health Coalition outcomes, impacts and their potential to support WIP goals and be captured in Virginia's annual reporting.	Ongoing		Included in Program Coordinator line item.
A42		VCE	The Graze 300 program enables Virginia farmers to achieve 300 days of livestock grazing by facilitating better pasture management and environmental stewardship.	Ongoing	The goal of this program is to improve both farm profitability and water quality by converting livestock producers to winter feeding management that is reliant upon grazing instead of a four-month long dependency on more costly hay feeding. Extending the grazing season will benefit	Included in Program Coordinator line item.

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					water quality through improved water infiltration, improved nutrient use efficiency, fewer barren areas in fields (winter feeding sites) and improved soil organic matter. Efforts will be made to explore Graze 300 outcomes and impacts and their potential to support WIP goals and be captured in Virginia's annual reporting. For more information visit the Graze 300 VA webpage .	
A43		DCR	DCR will work with partners to inform agricultural producers of the significant increase in tax credits that are available since Jan. 1, 2021 for both the implementation of BMPs and the purchase of certain types of equipment.	Dec. 31, 2023		
	Wastewater & Septic – Key Ongoing Activities					
W1	WIP Initiative 2	DEQ	Continue implementation of septic BMPs to address local impairments within the Chesapeake Bay watershed in Section 319(h) and Water Quality Improvement Fund (WQIF) implementation project areas.	Dec. 31, 2022	Includes coordinating implementation efforts where possible based upon VIMS and VDH mapping of existing and increased septic failures. Pursuant to wastewater equity legislation passed by the 2021 General Assembly (SB 1396), this also includes coordinating funding initiatives with VDH and the Department of Housing and Community Development as much as feasible.	Chesapeake Bay Restoration Fund
W2	WIP Initiatives 45, 51	DEQ	In partnership with VDH, and in consultation with stakeholders, implement the wastewater infrastructure needs assessment in accordance with Va. Code § 62.1-223.3.	Jul. 1, 2023		

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W3	WIP Initiatives 45, 51	DEQ	Conduct annual Water Quality Improvement Fund (WQIF) Wastewater Requests Estimates Report and include findings in annual Chesapeake Bay and Virginia Waters Clean Up Plan Report for the Governor and Virginia General Assembly.	Nov. 1, 2022 Nov. 1, 2023		
W4	WIP Initiative 52	DEQ	Register significant dischargers under the reissued watershed general permit (9VAC25-820). Modify watershed general permit (9VAC25-820) to incorporate Enhanced Nutrient Removal Certainty Program wasteload allocations and Chlorophyll-a based wasteload allocations.	Jan. 1, 2022 Jan. 30, 2022	General permit to be modified with SWCB adoption of Chlorophyll-a based wasteload allocations. The State Water Control Board will act on the rulemaking by Jan. 30, 2022. The rulemaking will not be complete and the general permit will not be modified until it has gone through executive review.	
W5	WIP Initiative 52	DEQ	Modify individual VPDES permits to incorporate Enhanced Nutrient Removal Certainty Program nutrient upgrade schedules and technology-based effluent limitations.	Jan. 1, 2022		
W6	WIP Initiative 51, p. 26	CCRM, VIMS	Mapping failed, failing and threatened onsite septic systems including systems in the coastal plain at risk to sea level rise.	Ongoing	This project identifies locations where septic systems are at risk from rising sea levels and the “lifespan” of existing systems under current sea level rise projections. Results to help inform VDH regulations or operations.	Chesapeake Bay Restoration Fund
W7	p. 26	CCRM, VIMS	Increasing the resiliency of Northern Neck communities vulnerable to flood impacts.	Ongoing	This project identifies threats, mitigation options, and policy solutions oriented around current and emerging onsite septic issues in socially vulnerable areas in the Northern Neck. Results will help target funding opportunities and application of other solutions.	Jesse Ball DuPont Fund

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W8		DEQ	Finalize and begin implementation of DEQ's American Rescue Plan Act (ARPA) Wastewater Funds Implementation Plan.	Dec. 31, 2022	Funding details are included in the budget proposal available on Virginia's LIS website .	
	Wastewater & Septic – WIP Chapter 7 Initiatives					
W8	WIP Initiative 52	DEQ	Complete amendments to the Water Quality Management Planning Regulation (9VAC25-720) to include Chlorophyll-a based wasteload allocations for significant James River dischargers and re-evaluate of industrial significant wasteload allocations.	Jan. 30, 2022	The State Water Control Board will act on the rulemaking by Jan. 30, 2022. The rulemaking will not be complete and the general permit will not be modified until it has gone through executive review.	
W9	WIP Initiative 53	DEQ	Submit for executive review a Notice of Intended Regulatory Action to amend Sewage Collection and Treatment Regulations (9VAC25-790).	Jan. 1, 2022		
			Establish Regulatory Advisory Panel and develop proposed amendments for consideration by State Water Control Board.	Jul. 1, 2022		
			Present proposed amendments to the State Water Control Board for final adoption.	Dec. 31, 2023		
W10	p. 163	Virginia Department of Health (VDH)	Improve data management and Onsite Sewage System inventory in VDH's internal enterprise database through data collection and quality improvement, improve data analytics by incorporating health equity considerations.	Aug. 2023	Secure funding to support data management and process improvement to include additional staff that will manage development and maintenance of technical tools for transferring external sources of septic data into VDH's internal enterprise database. The additional staff will conduct data analysis, visualization, and develop necessary partnerships in order to incorporate health equity	Additional state funding is required for new staff.

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					considerations and impacts in developing and prioritizing proposals to help septic system owners.	
W11		VDH	Replacement of failing onsite sewage system, straight pipes, and pit privies with regulatory compliant onsite sewage systems or sewer connections.	Dec. 2023	Install at least 100 new onsite sewage system or public sewer connections to replace failing onsite sewage systems, straight pipes, and pit privies. Project will target households at or below 200% of the federal poverty guidelines throughout the Chesapeake Bay Watershed.	\$5,750,000 in funding from the ARPA and \$250,000 pass through funding from DEQ for the CBIG Most Effective Basins Underserved Communities initiative. CBIG funding will target areas approved for Most Effective Basins only.
W12	p. 163	VDH	Enhance existing O&M online portal, VDH's internal enterprise database and related external interfacing for reporting conventional system maintenance.	Aug. 2023	<p>Allow for voluntary reporting of conventional system pumpouts and other maintenance. Collecting this data throughout the Chesapeake Bay watershed allows for better reporting of Nitrogen reduction.</p> <p>The development of an online portal for submission of conventional system pump outs is the first phase of a proposed pilot program to transition pumpouts in the Three Rivers and Eastern Shore Health Districts.</p>	Additional state funding required to pay for additional management, maintenance, and server costs.
W13	p. 163	VDH	Improve BMP reporting process through changes to data acquisition and analysis that modifies and interprets VDH's internal data and data validation and improve	Jul. 2022	Reassess current BMP reporting process to ensure all potential BMPs are included and are reporting the highest level of Nitrogen reduction. Work with VDH's Local Health Districts to update and validate the data associated with the	Additional funding necessary for Bay wide notifications for

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			reporting of annual maintenance for alternative onsite sewage systems.		alternative septic systems to then improve the BMP reporting. Additionally validate O&M reports and connect these to septic systems through improved process to ensure systems are retained in BMP reporting so long as they have one O&M report every 10 years. Validation utilizes fields submitted in the report such as address, certification statement, and operator information. VDH to ensure notice sent to all owners of alternative onsite sewage systems that are overdue for reporting of annual maintenance.	overdue maintenance reports.
W14		VDH	Implementation of additional BMP for 50% reductions from shallow drip dispersal installations.	Aug. 2022	Incorporate the 50% shallow drip dispersal BMP approved by the Chesapeake Bay Program Partnership into VDH's statewide database for future BMP reporting.	Funding through general maintenance to statewide database.
W15		VDH	Develop considerations of the impacts of climate change on proposed treatment works for inclusion in the Sewage Handling and Disposal Regulations. VDH work to update septic regulations and incorporate climate change.	Dec. 2023	VDH will work with a diverse group of stakeholders to develop considerations for the impacts of climate change. These considerations will be incorporated into comprehensive amendments to the Sewage Handling and Disposal Regulations, and will be submitted through the standards regulatory development process. These amendments will be created pursuant to Chapter 382 of the 2021 Special Session 1 Virginia Acts of Assembly.	Standard agency regulatory development resources.
W16	WIP Initiative 51	VDH	Engage stakeholders via the Wastewater Infrastructure Working Group to assess wastewater infrastructure needs and develop policy recommendations. Incorporate ongoing engagement of the Wastewater Infrastructure Policy Working Group pursuant to Chapter 382 of the 2021 Special Session 1 Virginia Acts of Assembly.	Dec. 2022, Dec. 2023	The Wastewater Infrastructure Working Group will work with stakeholders to submit annual reports to the Governor and General Assembly no later than December 2022 and December 2023. The reports will outline infrastructure needs based on assessments completed by participating stakeholders, including assessment of septic failure hotspots, and policy recommendations to: i) promote public education about the importance of adequate wastewater treatment; ii)	General funds provided to hire a Wastewater Infrastructure Manager at VDH.

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					encourage opportunities for local, state, and federal entities to coordinate the use of available wastewater infrastructure funding; iii) endorse community-based wastewater solutions for onsite wastewater systems; and iv) support prioritized, focused, and innovative uses of state and federal funding.	
	Developed Lands (Regulated & Unregulated Urban) – Key Ongoing Activities					
D1	WIP Initiative 41	VCE, VSU, DCR,	<p>Implement an urban nutrient management pilot project to train youth, via the VCE 4-H Program, to make turf grass management recommendations for homeowners.</p> <p>Pursue implementation of an urban nutrient management pilot project to train youth, via the VCE 4-H Program, to make turf grass management recommendations for homeowners.</p>	Jun. 30, 2023	Efforts will be made to teach youth evaluation techniques that result in the information that supports WIP goals and can be included in Virginia’s annual reporting.	State funds
D2		VDACS	Utilize fertilizer tonnage reporting system data to report annual fertilizer sales to DEQ.	Ongoing	Annual report of fertilizer sales posted on the VDACS website by Jan. 31 each year for previous fiscal year.	State funds
D3	WIP Initiative 42	VDACS	Utilize annual fertilizer application data to report acres of non-agricultural lands under management by Certified Fertilizer Applicators (CFAs) and receiving fertilizer in accordance with Nutrient Management Standards and Criteria.	Ongoing	Reported annually in June.	State funds
D4	WIP Initiative 42	VDACS	VDACS staff will continue to work with turfgrass industry contacts to conduct education and outreach regarding changes to the requirements of the 2 VAC 5-405, <i>Regulations for the Application of Fertilizer to Nonagricultural Lands</i> , to ensure accurate reporting.	Ongoing	Annually, as needed (as determined by staff)	State funds

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D5	WIP Initiative 44	DEQ	Conduct annual Stormwater Local Assistance Fund (SLAF) Requests Estimates Report and include findings in annual Chesapeake Bay and Virginia Waters Clean Up Plan Report for the Governor and Virginia General Assembly.	Nov. 1, 2022 Nov. 1, 2023	SLAF funding provided in the budget proposal available on Virginia's LIS website.	
D6	WIP Initiative 45	DEQ	Enhance marketing of funding opportunities for Non-MS4 localities. Incorporate marketing survey results into draft comprehensive marking plan. Finalize comprehensive marketing plan.	Dec. 31, 2022 Dec. 31, 2023		
D7	WIP Initiative 43	DCR, VASWCD	<p>Continue to support VASWCD for implementation of voluntary urban stormwater BMP retrofits through Soil and Water Conservation (SWCD) implementation of the Virginia Conservation Assistance Program (VCAP).</p> <p>DCR will work with VASWCD to insure that no less than 25% of the funding each fiscal year supports vulnerable populations, especially those of lower economic status, indigenous, historically underrepresented communities and people of color.</p> <p>VASWCD will provide financial and technical assistance for urban best management practices for homeowners and small properties via the Virginia Conservation Assistance Program (VCAP), DCR-SEAS, and other programs.</p>	Ongoing		State funds
D8	p. 9	DEQ	Reissue Prince William and Chesterfield MS4 Permits.	Jun. 30, 2022		DEQ has been awarded \$150,000 through an EPA grant to hire

Milestone Number	Phase III WIP Initiative or Page Number	Lead Agency/ Supporting Agencies	Actions & Deliverables	Target Dates	General Comments	Funding/ Grant Details
						contractors to assist with MS4 IP reissuance. DEQ is currently in the process of finalizing the call order to be advertised for bid to contractors.
D9	p. 9	DEQ	Reissue Fairfax and Henrico MS4 Permits.	Dec. 31, 2022		
D10	p. 9	DEQ	Reissue Chesapeake, Hampton, Newport News, Norfolk, Portsmouth and Virginia Beach MS4 Permits.	Sep. 30, 2023		
D11		DEQ	Evaluate the effects of modeled land use change resulting from the updates to CAST based on the new 2013-2017 land use analysis and other changes to the model. Determine any needed adjustment in WIP III effort to ensure any resulting increase in loads is fully offset.	2022-2023		
D12	p. 9	DEQ	Form Technical Advisory Committee for reissuance of Phase II (Small) MS4 general permit (9VAC25-890). Prepare proposed Phase II MS4 general permit and present to the State Water Control Board for public notice authorization. Reissue Phase II MS4 general permit (9VAC25-890).	Dec. 31, 2021 Sept. 30, 2022 Oct. 31, 2023		DEQ will be evaluating and designating new MS4s with the publication of the 2020 Census Urban Areas Maps (anticipated 2023). Many small towns, cities, and counties throughout Virginia could be designated

Milestone Number	Phase III WIP Initiative or Page Number	Lead Agency/ Supporting Agencies	Actions & Deliverables	Target Dates	General Comments	Funding/ Grant Details
						MS4s with the Census Bureau redefining Urban Area technical criteria to include areas formerly classified as Urban Clusters.
D13	WIP Initiative 48, p. 26	DEQ	<p>Finalize protocol for re-evaluating post-construction water quality design criteria requirements.</p> <p>Submit for executive review a Notice of Intended Regulatory Action to amend Virginia Stormwater Management Program Regulation (9VAC25-870) to update the water quality design criteria requirements if necessary.</p> <p>Submit for executive review a Notice of Intended Regulatory Action to amend Virginia Stormwater Management Program Regulation (9VAC25-870) to incorporate the use of future projected design storms for managing stormwater.</p> <p>Establish Regulatory Advisory Panel and develop proposed amendments for consideration by State Water Control Board.</p>	<p>Jan. 1, 2022</p> <p>Jul. 1, 2022</p> <p>Jul. 1, 2022</p> <p>Jan. 1, 2023</p>		
D14	p. 26, 154	CCRM. VIMS	Shoreline Management Model for preferred management approaches including Living Shorelines Suitability (SMM), Phase 5.1.	Ongoing	VIMS developed the model to inform local Wetlands Boards and VMRC decision-making. CCRM presents model output at Shoreline Workshops and specific trainings and digital newsletters. Project website updated as needed and in	CCRM, CZM Additional support of the model from state agencies may be necessary.

Milestone Number	Phase III WIP Initiative or Page Number	Lead Agency/ Supporting Agencies	Actions & Deliverables	Target Dates	General Comments	Funding/ Grant Details
					response to new authorities (www.vims.edu/ccrm and www.adaptva.org).	
D15	WIP Initiative 4, p. 153	CCRM, VIMS	Wetlands restoration targeting. This proposed work is to inform and increase the likelihood of wetlands restoration.	Dec. 2023	This effort will be part of Wetland Condition Assessment Tool. As both tidal and nontidal wetlands are approved CBP BMPs, projects implemented for nutrient and sediment load reduction also can provide habitat, flood and erosion control co-benefits for resilience.	
D16	WIP Initiative 4 p. 26, 153, 154	CCRM, VIMS	Develop strategies to enhance conservation and adaptation of wetlands in a changing climate.	Ongoing	This project looks at the ecosystem functions provided by newly migrated marsh in comparison to existing marshes. The results will be incorporated into WetCat.	Currently funded by the EPA wetland program development grant.
D17	p. 154	CCRM, VIMS, DCR - Shoreline Erosion Advisory Service (DCR/SEAS)	Accelerating water quality improvements in the James River through the living shoreline collaborative.	Ongoing	CCRM is a partner; James River Association is the lead. Partners include DCR/SEAS, Colonial SWCD and Wetlands Watch. Focus is on increased implementation of living shorelines in the James River to improve water quality. Building three projects with the first round of funding, established a living shorelines symposium process, a list serve, training and a monitoring network.	NFWF
	Developed Lands (Regulated & Unregulated Urban) – WIP Chapter 7 Initiatives					
D18	WIP Initiative 6	DCR	Provide opportunities for localities and individual communities, via the Community Flood Preparedness Fund, to establish nature based solutions, such as living	Ongoing	More information available on DCR's Virginia Community Flood Preparedness Fund webpage .	State funds

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			shorelines, to increase resilience and improve water quality. Funding opportunities will be published soon after every RGGI auction.			
D19	WIP Initiative 42	VDACS, Office of Secretary of Agriculture and Forestry (OSAg&F)	<p>Secured legislation to enhance existing lawn fertilizer contractor-applicator program. Effective Jul. 1, 2020. Virginia's General Assembly 2020 Session: Senate Bill 849 Lawn fertilizer; contractor-applicators.</p> <p>VDACS to amend 2 VAC 5-405, Regulations for the Application of Fertilizer to Nonagricultural Lands, to reflect regulatory changes required pursuant to Chapter 413 of the 2020 Acts of Assembly (SB 849): Consider additional amendments to this regulation to increase compliance. Target date Dec. 31, 2020.</p>	Oct. 1, 2022	<p>On Jul. 21, 2020, the Board of Agriculture and Consumer Services approved an exempt action to adopt amendments necessary to conform 2 VAC 5-405, Regulations for the Application of Fertilizer to Nonagricultural Land to changes in Virginia's Fertilizer Law. The exempt action, which decreased contractor-applicators' and licensees' annual reporting threshold, from 100 acres to 50 acres of nonagricultural lands to which fertilizer was applied, was published in the Register of Regulations on Oct.12, 2020, and became effective on Nov. 11, 2020.</p> <p>On Jul. 21, 2020, the Board of Agriculture and Consumer Services also approved a Notice of Intended Regulatory Action (NOIRA) for 2 VAC 5-405, Regulations for the Application of Fertilizer to Nonagricultural Lands, to determine the appropriate increase to the current maximum penalty and assess the need for additional penalties that will ensure compliance with this regulation. VDACS held an industry stakeholder meeting to develop recommendations regarding penalties for non-compliance of Regulations for the Application of Fertilizer to Nonagricultural Lands. Industry stakeholders recommended increased penalty amounts to the existing penalty and two additional penalties for non-compliance. The stakeholder recommendations were approved by the Board of Agriculture and Consumer Services on Jul. 20, 2021, initiating Stage 2 of the standard regulatory process.</p>	State funds

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D20	p. 154	DCR	Report on 57,000 additional linear feet of tidal shoreline newly stabilized and/or verified existing practices by the DCR Shoreline Erosion Advisory Service, using funding from a National Fish and Wildlife Foundation grant.	Jun. 30, 2023		NFWF
D21	WIP Initiative 47	DEQ	<p>Evaluate nutrient management planning under the Erosion & Sediment Control Regulations (9VAC25-840).</p> <p>Submit for executive review a Notice of Intended Regulatory Action to amend Erosion & Sediment Control Regulations (9VAC25-840).</p> <p>Establish Regulatory Advisory Panel and develop proposed amendments for consideration by State Water Control Board.</p>	<p>Mar. 1, 2022</p> <p>Sept. 1, 2022</p> <p>Mar 1., 2023</p>		
D22	WIP Initiative 49	DEQ	Perform a limited review of approximately 20 Virginia Stormwater Management Programs under the federally-delegated MS4 permitting and compliance program.	<p>Sept. 30, 2022</p> <p>Sept. 30, 2023</p>		
D23	WIP Initiative 50	DEQ	Review Urban Tree Canopy expert panel report for potential inclusion of Tree Planting on Virginia Stormwater BMP Clearinghouse (i.e., potential BMP for use under the VSMP). Update Virginia Stormwater BMP Clearinghouse to include Tree Planting, if applicable.	Jan. 1, 2022	DEQ prepared and published the stakeholder advisory group report pursuant to Chapter 405 of the 2020 Virginia Acts of Assembly (House Bill 520).	

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D24	WIP Initiative 49	DEQ	Explore alternatives to ensure re-verification of stormwater BMPs in areas where DEQ is the local stormwater management program authority.	Dec. 2023		
D25	WIP Initiatives 44, 46	OSNHR, DEQ, DCR, VCE, Planning District Commissions (PDCs), SWCDs, Non-Governmental Organizations (NGOs)	<p>Develop collaborative structure for multiple agencies and organizations implementing urban BMPs in non-MS4 areas to coordinate efforts, improve reporting, accelerate implementation and verify existing practices.</p> <p>Establish a task force of state agencies, local representatives and nongovernmental organizations to evaluate existing programs for implementing urban BMPs on unregulated developed lands to achieve the Phase III WIP targets. The task force will, at a minimum, consider a collaborative approach for multiple partners to accelerate implementation and verification of BMPs; recommend programmatic improvements or development of new programs; and determine funding needs. The task force will provide its recommendations to the SNHR.</p>	Oct. 1, 2022	Residential homeowners, churches, small businesses and many other urban landowners are encouraged to implement BMPs through technical support and financial assistance. Funding and staffing to support such implementation originates from multiple state, local and private organizations.	
D26	WIP Initiative 40	VCE, OSNHR	Through the Healthy Virginia Lawns (HVL) program, Extension Master Gardeners provide science-based information to homeowners on establishment and maintenance of lawns to reduce unnecessary chemical use that can harm the Chesapeake Bay.	Ongoing	The focus of the HVL program is to target residential lawn areas up to 1.5 acres. Efforts will be made to explore HVL outcomes and impacts and their potential to support WIP goals and be captured in Virginia's annual reporting.	Included in Program Coordinator line item.

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	Forestry – Key Ongoing Activities					
F1	p. 121	VDOF	Forest Harvesting Practices – VDOF will continue to provide technical assistance to USDA conservation agencies, SWCDs and landowners for afforestation, reforestation and implementation of riparian forest buffers; continue monitoring and enforcement of the Silvicultural Water Quality Enforcement program; and continuation of logger education programs through the SHARP logger and Sustainable Forest Initiative and training programs.	2022-2023	Strong partnership with Virginia Tech Extension SHARP Logger program. Harvest notification law facilitates onsite inspection process. Timber bridge program, preharvest plans and BMPs assist in water quality compliance. Last update to The Virginia Forest BMPs for Water Quality Guide was in 2011. Consideration for updating manual will be discussed and considered.	WQIF
F2	p. 121	VDOF	Urban Tree Canopy Program – Pursue consistent General Fund support to expand capacity of Urban and Community Forestry Program, utilize Urban Tree Canopy Analysis data, urban heat island studies and support tree canopy analysis in localities.	Ongoing	Since 2016, VDOF has grown U&CF Field positions in areas of high need. This has been accomplished by changes to existing classified position descriptions. Program leadership consists of two positions, the U&CF Program Manager and the U&CF Partnership Coordinator. Both positions remain grant-based positions with support from the U.S. Forestry Service. VDOF will seek permanent General funds to support these critical positions. In partnership with the Virginia Science Museum, the Virginia Foundation of Independent Colleges, and 8 localities, U&CF staff and grant dollars have been spent on heat island studies. The results of these studies will guide future work in addressing implementation of projects focused on mitigation. This will assist in connecting our water quality, food deserts, and climate change goals listed in the WIP.	USFS, Trees for Clean Water (WQIF), Tree City, Tree Campus USA, CBRAPP
F3	p. 121	VDOF	Improve technical assistance, collaboration and oversight of stream protection projects. Increase riparian forest buffers and urban tree canopy.	Ongoing	Increased WQIF funding in FY 2022. Seeking general fund support for leadership positions. This could increase available grant funds by re-allocation of USFS grant. Increasing projects as well as the potential for contract positions.	Utilize EPA/DEQ CBRAP Funding, Trees for Clean Water (WQIF). Received \$100,000 CBRAP

Milestone Number	Phase III WIP Initiative or Page Number	Lead Agency/ Supporting Agencies	Actions & Deliverables	Target Dates	General Comments	Funding/ Grant Details
					Funding for tree canopy capacity and implementation provided in the budget proposal available on Virginia's LIS website.	(DEQ pass-through), \$80,000 went into tree planting projects in underserved (DEQ Environmental Justice Tool) areas.
	Forestry – WIP Chapter 7 Initiatives					
F4	WIP Initiative 35	VDOF	Implement VDOFs Healthy Watershed Initiative recommendations to pilot proof of concept activities with a locality or localities within the Rappahannock River Basin study area designed to aggregate and represent landowners interested in securing carbon credits in the voluntary and/or regulatory carbon markets for retaining their forestland. Work with pilot locality/localities to design and implement an economic development authority (EDA) mechanism as authorized by the General Assembly in its 2019 session to provide EDAs with such authority. Establish contractual framework and locality point of contact to ensure that the legislative change regarding the EDA success is properly implemented. Success metrics will be number of contracts executed, number of acres enrolled in carbon credit markets and development of EDA.	Dec. 31, 2023	Two changes to code identified and addressed in the past two legislative sessions. HB2485 dealing with EDA allowing for aggregation of landowners in order to participate in carbon markets and SB 1343. SB1343 Virginia Freedom of Information Act; proprietary records and trade secrets; carbon sequestration agreements. Excludes from the mandatory disclosure provisions of the Virginia Freedom of Information Act proprietary information, voluntarily provided by a private business under a promise of confidentiality from a public body, used by the public body for a carbon sequestration agreement.	HB 2485 to amend and reenact § 15.2-4901 of the Code of Virginia, relating to industrial development authorities; legislative intent. CBP, U.S Endowment for Forests and Communities, Chesapeake Bay Trust
F5	WIP Initiative 35	VDOF	Implement VDOFs Healthy Watershed Initiative – Create policy and financial infrastructure needed to facilitate forest and agricultural land conservation and retention at a landscape scale on a long-term basis. Metrics: Securing term length carbon credit contracts for	Jun. 2022	Moving forward with Fauquier and Essex counties primarily. Orange county is also involved. Need to develop aggregation methodology and program sign up process. With passing of HB2485 and SB1343, barriers to implementation have been addressed. This new legislation went into effect Jul. 1, 2021.	Chesapeake Bay Program (CBP), U.S. Endowment for Forests and Communities, Chesapeake Bay Trust,

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			forestland owners within the voluntary carbon credit market, realized market access and number of acres enrolled in the carbon sequestration market will measure success.			Rappahannock River Basin Commission
F6	WIP Initiatives 35, 36, 37	VDOF	Forest Buffer – VDOF Watershed Coordinator position will increase implementation of programs and strategic initiatives. This new program and position will continue to utilize existing programs and partnerships to deliver on buffer establishment in the urban and rural sectors. The VDOF will work with urban localities within the watershed to discuss barriers and needs to ensure urban canopy retention and establishment. Increases in WQIF money received will be used to administer the “Trees for Clean Water” grant program. VDOF will develop a matrix to realize effectiveness of “Maturity Measurements” concept. Continue to utilize community revitalization projects, raise citizen awareness and educational opportunities through outreach efforts and partner projects.	Jan. 2022	Position funding provided as of Jul. 1, 2021. Position was advertised and interviews are forthcoming. Anticipated start date for new hire is Sept. 2021. Funding for three additional field level positions was also provided. These positions will have buffer establishment duties as well as conservation easement stewardship responsibilities.	Trees for Clean Water, VEE Middle James River Watershed grant, CBP, USFS Chesapeake Watershed Forestry Program
F7	WIP Initiatives 36, 37	VDOF	Improve technical assistance, collaboration and oversight of stream protection projects. Utilize the Watershed Program Manager for Chesapeake Bay Initiatives. Increase riparian forest buffers, urban tree canopy, and urban stormwater credit practices, develop BMPs for mitigation of concentrated flows, seek crediting program for rural and urban forestland owners plan development and ensure crediting for Green Infrastructure practices and plans. Utilize the recently developed Watershed Prioritization tool to target	Dec. 31, 2023	Watershed Prioritization Tool is completed, and continues to evolve by adding new/improved layers as needs change or are available. Field supervisors are encouraged to use this GIS based tool when developing staff Employee Work Profiles. This allows them to better target work in areas of greatest need. Utilizing funds from the Chesapeake Bay Restoration Fund the VDOF will lead an effort to assess additional RFB needs. The VDOF will hire a contractor that will be developing a decision support tool to help identify	DEQ, CBRAP, EQIP, CREP, Chesapeake Bay Restoration Fund

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			specific areas of need within VDOF Work Areas to drive implementation of projects and focus on watersheds of highest need.		the best incentive program options for landowners based on relevant criteria of their property and ownership.	
F8	WIP Initiative 37	VDOF	Urban Tree Canopy Program – Develop and provide a tree tracking platform to record and report on tree planting projects using data expected to be available to Chesapeake Bay jurisdictions through Chesapeake Conservancy Cooperative Agreement with federal government.	Dec. 31, 2023	My Tree Counts App is complete and has been field-tested. Field staff, partners and the general public piloted this program successfully in 2020-2021. Outreach efforts to be constructed and coordinated roll out to local jurisdictions NGOs, across the state and Chesapeake Bay Watershed. This will increase tracking of tree planting efforts and implementation of small to medium scale projects that occur outside of the influence of the VDOF. This will increase access to the application by the general public and volunteer planting projects that may not include VDOF interaction. Reporting platform correlates to CAST report needs/standards increasing the accuracy of progress reporting.	USFS, CPG funds
F9	WIP Initiative 37	VDOF	Tree Planting Forest Canopy – Utilize Green Infrastructure plans, Urban Forest Management Plans and institute the USFS Tree Canopy Analysis and Tree Inventory programs to develop a matrix to focus on Maturity Measurement protocols.	Dec. 31, 2023	Watershed Program Manager will lead this effort. Current target date for hire Sept. 2021. Roll out of draft methodology to USFS Forestry Workgroup Dec. 2022.	
F10	WIP Initiative 38	VDOF, OSAg&F, Office of Secretary of Veterans and Defense Affairs (OSVDA), OSNHR	The Secretaries of Agriculture and Forestry and Veterans and Defense Affairs in partnership with the Governor’s Special Assistant for Coastal Adaptation and Protection, the Commonwealth’s military installations, local governments, and NGOs representing conservation, farming, forestry, private landowners and others are heading a geographically diverse partnership	Dec. 31, 2022	A “Pre-Application” was submitted in Mar. 2021 and the SLCC was awarded the opportunity to submit a “Full-Application” on Aug. 31, 2021. Acceptance pending. Should the full designation be awarded, the VDOF anticipates receiving an award of \$300,000 three-year award to support a Program Coordinator. This Coordinator will work hand and hand with the Sentinel Landscapes	United States Department of Defense (DOD), U.S. Department of Interior (DOI), USDA, U.S. Bureau of Land Management (BLM),

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			<p>to seek a Sentinel Landscape designation in 2021 from the federal government encompassing much of the eastern portion of the Commonwealth. The VDOF has been designated the lead agency responsible for the effort.</p> <p>The federal Sentinel Landscapes Partnership initiative was created to sustain military readiness, reduce the effects of incompatible development around military installations, conserve working forests and agricultural lands and protect wildlife habitat by focusing on areas where these priorities overlap. The military, federal agencies, including the Departments of Defense, Agriculture and the Interior (DoD, USDA and DOI), state governments, NGOs, and other partners coordinate their conservation and working lands programs in support of ranching, farming, forestry, and conservation practices compatible with the military installations in partnership with the landowners in the landscape. A pre-application was submitted in Mar. 2021 and the SLCC was awarded the opportunity to submit a “Full-Application” on Aug. 31, 2021. Acceptance pending.</p>		Coordinating Committee, the VDOF and the SL Management Committee. The Sentinel Landscape designation is an important tool to protect critical military infrastructure while building on established environmental initiatives. Executive Directive 14 formally established the Virginia Security Corridor State Coordinating Committee. The Committee, in place since 2018, is dedicated to exploring regional compatible land use to advance collective goals that will strengthen military readiness, empower landowners, and protect Virginia’s natural resources. The SL designation will facilitate coordination and implementation of coastal resiliency projects, climate change initiatives, afforestation projects, address heat islands in underserved communities and align conservation easement goals.	non-governmental organizations (NGOs), conservation partners
F11	WIP Initiative 39	VDOF	Encourage Tree Conservation. Review existing legislation. Work with localities to potentially enhance state code to reflect the benefits of conserving trees that provide environmental benefits. Watershed wide and state wide meetings to be held to determine barriers to Tree Conservation in urbanized and urbanizing areas of Commonwealth. VDOF is participating in stream buffer	Spring 2022	VDOF is participating in stream buffer program analysis, carbon sequestration analysis, urban canopy analysis and a wetland and stream mitigation bank. (HB1983, SB1393 & SB1374). VDOF with the Green Infrastructure Center completed an existing legislations review and provided a Final Report outlining the findings of localities, partners and recommendations.	

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			program analysis, carbon sequestration analysis and urban canopy analysis.			
Multiple Sectors – WIP Chapter 7 Initiatives						
M1	p. 16	Virginia Marine Resources Commission (VMRC)	Work with the USACE and VIMS to establish an integrated Submerged Aquatic Vegetation (SAV) mitigation policy for unavoidable losses of SAV.	Dec. 2023		
M2	p. 26, 154	VMRC, DEQ	Produce integrated shoreline guidance with DEQ for ensuring consistent management of shoreline resources through each jurisdiction.	Jun. 2022		Coastal Zone Management Grant to DEQ
M3	WIP Initiatives 1, 6, 11	VMRC	Work with federal and non-federal partners to meet tributary-specific oyster restoration goals developed for each of the Virginia tributaries slated for large-scale oyster restoration as part of the 2014 Chesapeake Bay Watershed Agreement (Lafayette River, Lynnhaven River, Piankatank River, Lower York River, and Great Wicomico River, Elizabeth River Eastern Branch). Assist in the coordination of other partners’ planned restoration projects. Maintain, monitor, expand, and continue to protect past and ongoing restoration efforts throughout Virginia.	Oct. 2022 for restoration construction completed in the Lower York River Ensure the protection, maintenance and expansion of restoration efforts through 2025 and beyond.	Restoration construction targets met in the Piankatank, Great Wicomico, Lafayette and Elizabeth Rivers. The funding and planning required to meet goals in the York and Lynnhaven River has been obtained/completed and construction is ongoing.	Funding: state funds, federal grants (National Oceanic and Atmospheric Administration (NOAA)) Federal and NGO partners have plans and funding to construct the remaining target acreage in Lynnhaven. VMRC has plans and funding to construct the remaining target acreage in Lower York.

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M4	WIP Initiative 1	DEQ	Continue evaluation and updates to BMP Warehouse system to facilitate verification. Deliver training module following system upgrades and on Warehouse. Continue working with implementation partners to ensure complete and accurate reporting. This will include execution of recent Memoranda of Agreement between DEQ and VDOF, VMRC, DCR and DWR to establish reporting protocols for the programmatic work of these partner natural resource agencies as well as implementation efforts on lands owned by these agencies.	Dec. 31, 2022		
M5	WIP Initiative 2	DEQ	Begin implementation of CBPA regulations amendments to address “(vi) coastal resilience and adaptation to sea-level rise and climate change.” This includes drafting guidance and other tools and training to aid in locality adoption of provisions.	Jul. 1, 2022	Develop Guidance and Implementation Tools.	NOAA and EPA funding to work with PDCs, VIMS, and William & Mary Coastal Policy Center
M6	WIP Initiative 8	DEQ	Develop and implement a “pay for documented performance” pilot program incentivizing contracting and construction of innovative nutrient removal technologies.	Dec. 31, 2022		
M7	WIP Initiative 3	DEQ, OSNHR	Implementation of the State Lands WIP will be supported by an interagency technical team to provide guidance and technical assistance to land holding agencies. Work will kick-off with an analysis to identify specific opportunities for implementation of cost	Dec. 1, 2022	State Lands Implementation Opportunities Analysis conducted by Green Infrastructure Center (GIC). Updated information on the State Lands Watershed Implementation Plan can be found on DEQ’s Chesapeake Bay Phase III WIP webpage .	GIC analysis funded through Chesapeake Bay Restoration Fund

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			effective BMPs with significant co-benefits on State owned lands.		Funding to implement the State Lands WIP is included in the budget proposal available on Virginia's LIS website .	
M8	WIP Initiative 4	Department of Wildlife Resources (DWR)	Provide technical assistance to public and private landowners, impacting wetlands through management, enhancement or restoration.	Ongoing		Game Protection Fund; Virginia Migratory Waterfowl Stamp Fund; USFWS Wildlife Restoration program
M9	WIP Initiative 4	DWR	Develop and implement wetland restoration and/or enhancement projects on DWR lands.	Ongoing		Game Protection Fund; Virginia Migratory Waterfowl Stamp Fund; USFWS Wildlife Restoration program; other competitive grant programs
M10	WIP Initiative 4	DWR	Collaborate with partners to secure \$4,000,000+ in new funding to support wetlands acquisition, enhancement, or restoration projects.	Dec. 31, 2023		Competitive grants (e.g., Coastal Wetlands Conservation Act grants, North American Wetlands Conservation Act grants, Virginia Land Conservation Foundation and state Land & Water Conservation Fund grants), NGO match

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M11	WIP Initiative 4	DWR	Leverage DWR's Virginia Migratory Waterfowl Stamp Fund competitive grant program to fund four projects that restore or enhance wetlands in the Bay watershed through collaborations with three unique non-governmental partners; update proposal evaluation criteria to include incentives for submissions within the Chesapeake Bay watershed.	Dec. 31, 2023		Virginia Migratory Waterfowl Stamp Fund; NGO partner match
M12	WIP Initiative 4	DWR	Provide 1,500 hours of coordination to state, regional and national wetlands and associated species conservation planning efforts, including Phase III WIP, Atlantic Coast Joint Venture, Appalachian Mountain Joint Venture, North American Waterfowl Management Plan, Virginia Wildlife Action Plan, U.S. Shorebird Conservation Plan, and North American Waterbird Conservation Plan, impacting wetlands via acquisition, enhancement or restoration.	Ongoing		Game Protection Fund; Virginia Migratory Waterfowl Stamp Fund; USFWS Wildlife Restoration grant; competitive grants; partner match
M13	WIP Initiative 10	DEQ, OSNHR	The Commonwealth, in consultation with stakeholders, will continue to consider options available under the Clean Water Act to apply to the Administrator of the EPA for a No Discharge Zone (NDZ) for all or portions of the Chesapeake Bay mainstem and its tributaries. Includes evaluating additional data, information, and stakeholder engagement based upon initial information gathering efforts and evaluating extent of any No Discharge Zone.	Dec. 31, 2022		Chesapeake Bay Restoration Fund

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M14	WIP Initiative 12	DCR (lead agency), supported by Department of Historic Resources (DHR), DWR, VDOF, Virginia Outdoors Foundation (VOF)	Continue to conduct Virginia Land Conservation Fund (VLCF) and Land and Water Conservation Fund (LWCF) grant rounds, scoring projects using ConserveVirginia . Continue to use ConserveVirginia to target state funded acquisitions and mitigation.	Ongoing	ConserveVirginia is now included in scoring criteria for all projects considered in these two grant programs at state level.	State funds
M15	WIP Initiative 46	DEQ	Evaluate long-term partnerships with local PDCs; engage 15 Bay watershed PDCs on continued implementation as well as Environmental Justice initiatives. Work includes continued support for the PDCs to engage localities, regional and state partners regarding Bay WIP III programmatic actions and implementation activities	Dec. 31, 2022		
M16	WIP Initiative 5	DEQ	Continue working with Bay Program partners to improve the Partnership's ability to estimate water quality benefits resulting from enhanced air emission reductions and incorporate them into the modeling system. Develop annual estimates of the nitrogen reductions resulting from such actions.			
M17	p. 154	CCRM, VIMS, William & Mary Biology Department	Decision-support model for computing sediment and nutrient removals of a living shoreline based on design parameters.	Ongoing	This model will be delivered in a web-based format for computing the removal capacity of a living shoreline by size/design. The intended audiences are locality planners and homeowners.	Honda

Milestone Number	Phase III WIP Initiative or Page Number	Lead Agency/ Supporting Agencies	Actions & Deliverables	Target Dates	General Comments	Funding/ Grant Details
M18	p. 154	CCRM, VIMS	Wetland Board Training, outreach, digital publications	Ongoing	Decision-maker workshops. Shoreline Contractor Training.	CZM, EPA, others
M19	p. 154	CCRM, VIMS, VCE (Master Gardeners and Master Naturalists), VASWCD, Local Governments	<p>Initiated a program with Northern Neck Master Gardeners to train them to provide shoreline management assessments focused on living shorelines. In the beginning stages of training Master Naturalists in the Colonial SWCD to do the same.</p> <p>Building upon existing Northern Neck Master Gardeners program that worked closely with partners at the Virginia Institute of Marine Science and county governments to build the Shoreline Evaluation Program, an educational outreach effort that has provided hundreds of property owners with recommendations for improving upland stormwater management, pollutant and sediment runoff, and shoreline erosion.</p>	Ongoing	Efforts will be made to evaluate the outcomes of the Shoreline Evaluation Program, expand the program to new localities, and capture outcomes in a manner that can be included with Virginia’s annual reporting. See the Northern Neck Master Gardeners webpage for further information about this program.	Provided as Advisory Service.
	Trading & Offsets					
T1	p. 11	DEQ	Publish annual watershed general permit nutrient loads report.	Apr. 1, 2022 Apr. 1, 2023		
T2	p. 11	DEQ	Publish annual watershed general permit trades report.	Jul. 1, 2022 Jul. 1, 2023		
	Reporting, Verification & Accountability					
R1	WIP Initiative 1	DEQ/DCR	Update BMP Verification QAPPs annually and submit to EPA for approval.	Dec. 1, 2022 Dec. 1, 2023		

Milestone Number	Phase III WIP Initiative or Page Number	Lead Agency/ Supporting Agencies	Actions & Deliverables	Target Dates	General Comments	Funding/ Grant Details
R2	p. 11	CCRM, VIMS	Enhance 3D coastal model (schism); from basin to creek – water quality model.	Dec. 31, 2023	WQ model for entire east+Gulf coasts, with high resolution/focus on Chesapeake Bay (as a demo).	Applied for NOAA grant.
R3	p. 160	DEQ	Update DEQ’s Chesapeake Bay Nutrient and Sediment Reduction Milestones webpage to include periodic numeric milestone progress.	Ongoing	Updates will be posted quarterly.	

Note: Virginia has addressed the predicted impacts associated with climate change through 2025 in the Phase III WIP. Preliminary estimates for the climate impact through 2035 indicate a doubling of the 2025 load effect. Virginia has established policies and programs which provide for addressing climate change and coastal resilience, and will continue to adapt our initiatives as the science and understanding of the predicted 2035 impacts, and beyond, is better established.